

**REMARKS**

In the present Amendment, claim 1 has been amended to incorporate therein the subject matter of claim 9, to recite that the semiconductor-metal-containing layer further containing a nitrogen atom. Claim 9 has been canceled.

Withdrawn method claim 16 has been amended to include all of the limitations of device claim 1. If claim 1 is found to be allowable, Applicants respectfully request the Examiner to rejoin claim 16 pursuant to MPEP § 821.04.

No new matter has been added. Entry of the Amendment is respectfully requested.

Upon entry of the Amendment, claims 1, 3-7 and 12-16 will be all the claims pending in the application.

Claims 1-7 and 9-15 were rejected under 35 U.S.C. §103(a) as being unpatentable over Onomura (U.S. Pat. No. 6,067,309) in view of Takatani (JP 10-303504).

Applicants respectfully traverse.

Claim 1, as amended, recites that the semiconductor-metal-containing layer further containing a nitrogen atom. Claim 1 is amended to incorporate therein the subject matter of claim 9.

Regarding claim 9, on page 7 of the Final Office Action dated March 3, 2010, the Examiner asserted that Takatani discloses that the semiconductor-metal-containing layer (the interface between 102\_PtGa and 101\_GaN) further contains a nitrogen atom (as seen in Fig. 1 of Takatani). Applicants respectfully disagree with the Examiner's interpretation of Takatani.

Contrary to the Examiner's assertion, Fig. 1 of Takanani does not disclose an interface containing a nitrogen atom. In particular, Takatani describes in paragraph [0024] that "in compound layer 102 formed by this process a compound (alloy) consisting of Ga and Pt is formed in a controlled manner, by depositing Pt and Ga atoms directly on GaN layer 101, so that the molecular binding between Pt and N is inhibited."

It is respectfully submitted that the absence of the molecular binding between Pt and N means that Pt and N are not in a mixed state. Therefore, Takatani does not disclose or teach a semiconductor-metal-containing layer containing a nitrogen atom, as required by present claim 1.

Accordingly, the present claims are patentable over Onomura in view of Takatani, withdrawal of the foregoing rejection under 35 U.S.C. § 103 and rejoinder of withdrawn method claim 16 is respectfully requested.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.114(c)  
U.S. Application No.: 10/589,611

Attorney Docket No.: Q80165

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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**23373**

CUSTOMER NUMBER

Date: July 1, 2010